Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the above-captioned patent application:

LISTING OF CLAIMS

1. (Currently Amended) A device for the separation of a component in a liquid sample prior to the detection of an analyte in said liquid sample, said device having a non-porous substrate comprising:

a sample receiving zone;

a substrate surface;

a separator element ~~wherein said separator element consists of~~ having first projections substantially vertical to said substrate surface having a height, diameter, and reciprocal spacing, forming a gradient with regard to the diameter or reciprocal spacing of said first projections such that separation of the component occurs, and wherein said separator element is provided adjacent to or in said receiving zone; and

a transport or incubation zone connected to said receiving zone thereby forming a flow path on said non-porous substrate, wherein at least part of said flow path ~~consists of~~ has areas of second projections substantially vertical to said substrate surface, said second projections having a height, a diameter and a reciprocal spacing such that lateral capillary flow of said liquid sample in said transport or incubation zone is achieved, said flow path on said non-porous substrate being defined by an open flow path wherein said lateral capillary flow is capable of being induced solely due to said first and said second projections without requiring additional structure to induce or assist said flow.

2. (Previously Presented) The device according to claim 1, wherein the gradient with regard to the diameter or reciprocal spacing of said first projection is adapted to prevent said component from substantially leaving said receiving zone.

3. (Previously Presented) The device according to claim 1, wherein said receiving zone further contains an enhancing element adapted to enhance the separation capability of said separator element.

4. (Previously Presented) The device according to claim 3, wherein said enhancing element are compounds capable of forming aggregates of said component to be separated.

5. (Previously Presented) The device according to claim 4, wherein said compounds are beads derivatised with, or carrying on their surface, compounds capable of forming aggregates of said component to be separated.

6. (Previously Presented) The device according to claim 1, wherein said reciprocal spacing of said first projections is in the interval of 1 – 100 μm.

7. (Previously Presented) The device according to claim 6, wherein said reciprocal spacing of said first projections varies, forming a gradient in the direction of flow.

8. (Previously Presented) The device according to claim 7, wherein said reciprocal spacing of said first projections varies from about 7 to about 1 μm.

9. (Previously Presented) The device according to claim 1, wherein said receiving zone forms a basin adapted to contain a part of the sample separated by said separator element.

10. (Previously Presented) The device according to claim 1, further comprising a second separator element provided adjacent to or in said receiving zone having specific affinity for said component to be separated.

11. (Previously Presented) The device according to claim 10, wherein said second separator element having specific affinity for said component to be separated is a compound that is soluble or dispersible in said liquid sample and predispensed in said receiving zone.

12. (Previously Presented) The device according to claim 10, wherein said second separator element having specific affinity for said component to be separated are agents with specific affinity to said component to be separated bound to the surface of the first projections.

13. (Withdrawn) The device according to claim 10, wherein said separator element having specific affinity for said component to be separated are beads having, bound to their surface, agents with specific affinity for said component to be separated.

14. (Withdrawn) The device according to claim 13, wherein said beads have a magnetic core.

15. (Withdrawn) The device according to claim 14, wherein said device further comprises a magnet.

16. (Withdrawn) The device according to claim 15, wherein said magnet is a permanent magnet or an electromagnet.

17. (Previously Presented) The device according to claim 10, wherein said receiving zone forms a basin capable of containing a part of said liquid sample separated by said second separator element.

18. (Previously Presented) the device according to claim 17, wherein a magnet is positioned in the vicinity of said basin.

19. (Previously Presented) The device according to claim 1, further comprising an element for subjecting the sample to ultrasonic standing waves.

20. (Previously Presented) The device according to claim 19, wherein said element for subjecting the sample to ultrasonic standing waves comprises at least two ultrasonic energy sources arranged to establish a pattern of nodes within said flow path by interference between their outputs, defining a standing wave.

21. (Withdrawn) The device according to claim 19, wherein said means for subjecting the sample to ultrasonic standing waves comprises at least one ultrasonic energy source and a reflector, arranged to establish a pattern of nodes within said flow path by interference between their outputs, defining a standing wave.

22. (Previously Presented) The device according to claim 19, wherein said receiving zone forms a basin capable of containing a part of said liquid sample separated by said element for subjecting the sample to ultrasonic standing waves.

23. (Previously Presented) The device according to claim 1, wherein said substrate is a plastic substrate.

24. (Withdrawn) The device according to claim 1, wherein said substrate is a silicon substrate or a glass substrate.

25. (Previously Presented) The device according to claim 5, wherein said beads are selected from the group consisting of glass beads, polymer beads, metal beads, and a combination of glass beads, polymer beads, or metal beads.

26. (Withdrawn) A method for the detection of an analyte in a liquid sample, wherein said detection occurs on a non-porous substrate, said method comprising:

applying said sample to a receiving zone on said substrate;

transporting, through capillary action, said liquid sample through a flow path on said substrate, wherein said flow path comprises areas of projections substantially vertical to a surface of said substrate, said projections having a height, diameter and reciprocal spacing;

achieving lateral capillary flow of said liquid sample; and

separating a component from said liquid sample without interruption of said lateral capillary flow.

27. (Withdrawn) The method according to claim 26, wherein said separating is achieved using a separator element having second projections substantially vertical to said surface of said substrate, and having a height, diameter and reciprocal spacing, said separator adapted to substantially prevent said component to be separated from said liquid sample from leaving receiving zone.

28. (Withdrawn) The method according to claim 26, wherein said receiving zone further contains an enhancing element adapted to enhancing the separating ability of said separator element.

29. (Withdrawn) The method according to claim 28, wherein said enhancing element comprises compounds capable of forming aggregates of said component to be separated.

30. (Withdrawn) The method according to claim 29, wherein said compounds are beads derivatised with, or carrying on their surface, compounds capable of forming aggregates of said component to be separated.

31. (Withdrawn) The method according to claim 27, wherein said reciprocal spacing of said second projections is in the interval of about 1 to about 100 μm.

32. (Withdrawn) The method according to claim 31, wherein said reciprocal spacing (t1, t2) of said second projections varies, forming a gradient in the direction of the flow.

33. (Withdrawn) The method according to claim 32, wherein said spacing varies from about 7 to about 1 μm.

34. (Withdrawn) The method according to claim 26, wherein a part of said liquid sample that is separated by said separator element is contained in a basin, formed by said receiving zone.

35. (Withdrawn) The method according to claim 26, wherein separating is enhanced by a enhancing element, said enhancing element having specific affinity to said component to be separated from said liquid sample and wherein said enhancing element is provided in said flow path.

36. (Withdrawn) The method according to claim 35, wherein said enhancing element comprises second projections substantially vertical to said surface of said substrate, said second projections having a height, diameter and reciprocal spacing wherein said second projections are adapted to allow capillary flow of said liquid sample, and wherein said second projections are provided with, bound to their surface, agents with specific affinity to said component to be separated.

37. (Withdrawn) The method according to claim 35, wherein said enhancing element having specific affinity to said component to be separated comprises beads having, bound to their surface, agents with specific affinity to said component to be separated.

38. (Withdrawn) The method according to claim 37, wherein said beads have a magnetic core.

39. (Withdrawn) The method according to claim 38, wherein said beads are retained or removed from the flow by a magnet arranged in or adjacent to said flow path.

40. (Withdrawn) The method according to claim 39, wherein said magnet is a permanent magnet or an electromagnet.

41. (Withdrawn) The method according to claim 35, is contained in a basin, formed by said receiving zone.

42. (Withdrawn) The method according to claim 41, wherein a magnet is positioned in the vicinity of said basin.

43. (Withdrawn) The method according to claim 26, wherein said separating is enhanced by subjecting said sample to ultrasonic standing waves.

44. (Withdrawn) The method according to claim 43, wherein said ultrasonic standing waves are generated by at least two ultrasonic energy sources arranged to establish a pattern of nodes by interference between their outputs, defining a standing wave within said flow path.

45. (Withdrawn) The method according to claim 43, wherein ultrasonic standing waves are generated by at least one ultrasonic energy source and a reflector, arranged to establish a pattern of nodes by interference between their outputs, defining a standing wave within said flow path.

46. (Withdrawn) The method according to claim 43, wherein a part of said liquid sample that is separated is contained in a basin formed by said receiving zone.

47. (Withdrawn) The method according to claim 26, wherein said substrate is a plastic substrate.

48. (Withdrawn) The method according to claim 26, wherein said substrate is a silicon substrate or a glass substrate.

49. (Withdrawn) The method according to claim 29, wherein said compounds comprise a chemical group selected from the group consisting of hydrophilic groups, hydrophobic groups, positively and/or negatively charged groups, silicon oxide, carbohydrates, lectins, amino acids, macromolecules, and antibodies.

50. (Withdrawn) The method according to claim 30, wherein said compounds derivitised with, or carried on the surface of said beads, comprise a chemical group selected from the group consisting of hydrophilic groups, hydrophobic groups, positively and/or negatively charged groups, silicon oxide, carbohydrates, lectins, amino acids, macromolecules, and antibodies.

51. (Withdrawn) The method according to claim 30, wherein said beads are selected from the group consisting of glass beads, polymer beads, metal beads, and a combination of glass beads, polymer beads, or metal beads.

52. (Withdrawn) A method for separating a component in a sample, wherein a device according to claim 1 is used.

53. (Previously Presented) The device according to claim 23, wherein said plastic substrate is a thermoplastic substrate.

54. (Withdrawn) The method according to claim 47, wherein said plastic substrate is a thermoplastic substrate.

55. (Canceled).